

ABSTRACT

An air intake device for an internal combustion engine comprises a primary inlet duct having an inlet opening, and a secondary inlet duct having a inlet end provided with an inlet opening and a rear end closed with a reflector wall. An outlet end of the primary duct is in fluid communication with the internal combustion engine, while the inlet opening of the secondary inlet duct is adapted to receive intake air. The primary inlet duct extends into the secondary inlet duct so as to form a double-tube chamber within the secondary inlet duct including a resonant cavity defined between the primary inlet duct and the secondary inlet duct. The double-tube chamber is sized so as to generate sound waves enhancing propagation of an intake air flow toward the at least one cylinder of the internal combustion engine through the primary inlet duct.